



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,527	05/15/2006	Yves Decoster	ETF-0045	3003
23413 7590 02/26/2008 CANTOR COLBURN, LLP 20 Church Street 22nd Floor Hartford, CT 06103				
EXAMINER				
PATEL, FUNAM				
ART UNIT		PAPER NUMBER		
2855				
MAIL DATE		DELIVERY MODE		
02/26/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,527

Applicant(s)

DECOSTER, YVES

Examiner

PUNAM PATEL

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 11-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)
- Paper No(s)/Mail Date 5/15/2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 11, 12, and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 20, and 24 of copending Application No. 11/578,982. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim a seat occupancy sensor comprising a plurality of pressure sensitive switches electrically connected to a SAW device comprising an antenna and a resonator.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the text is not in English. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Specification teaches the pressure detection device being integrated between the trim, 16, and the seat foam, 18 (see page 8, lines 15-18 & Fig. 1). No sealing method is taught for enclosing the pressure sensor in the seat. Is the sealed chamber referring to the seat? Is the sealed chamber part of the dedicated pressure sensor?

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2855

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites the limitation "the sealed chamber" in line 3. There is insufficient antecedent basis for this limitation in the claim. It is unclear as to where this sealed chamber is located or what purposes it serves with respect to the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 11, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeidler et al. (US 5,612,876) in view of Steindl et al. (R. Steindl, A. Pohl, F. Seifert, "Impedance loaded SAW-sensors offer a wide range of measurement opportunities," in

Proc. IEEE MTT-S, Anaheim, CA 1999, pp. 1453-1456.) and Ishiyama (Abstract of JP 8087557).

With respect to Claims 1, 14, and 15, Zeidler et al. teach a seat occupancy sensor system comprising:

- a seat cushion (#1);
- a resistive pressure sensor (Fig. 3, #s 10.1 and 10.2 & col. 2: 30-33);
- a control unit (# 9) for communicating with the sensor via cable wires (col. 4: 63-65).

Murphy et al. fail to teach a SAW device with a resonator and an antenna.

Ishiyama teaches a comparable device (Abstract, seat with sensors for detecting “using states of seat”, read as occupancy sensing, wherein the sensors are located in the armrests) that utilizes wireless communication means for transmitting the “seat using” information (Abstract). Ishiyama teaches that wireless signal transmission in a seat occupancy sensor system is a known technique in the art.

Steindl et al. teach electrically connecting SAW transponders to conventional resistive type pressure sensors/switches (Abstract & pg. 1453, col. 2) for wireless sensor readout (I. Introduction). The SAW transponder comprises at least two resonators (pg. 1455, IV. Hybrid Sensors & Pressure and temperature sensor, wherein one of the IDT reflectors measures wherein temperature effects, such as a time scaling of the sensors response, to the SAW device) and an antenna (Fig. 3). It is understood in the art the oscillation frequency of the device is dependent upon environmental temperature, strain/stress experienced by the substrate, etc.

It would have been obvious to one of ordinary skill in the art at the time of the invention to replace cables connected to the sensors of the seat occupancy sensor system of Zeidler et al., with a wireless SAW transponder, as taught by Steindl et al. in order to simplify the system of Zeidler by reducing the risk of cable breakage and utilizing a passive signal transmitting means that requires no active electrically power supply. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

With respect to Claim 11, Zeidler et al. further teach the pressure sensor being an absolute type sensor/position switch (col. 2: 57-63).

With respect to Claim 13, Zeidler et al. further teach a plurality of pressure sensors/switches (Figs. 1 and 3, wherein two regions for placing the sensor/switches are shown).

Claims 1, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breed et al. (US 2004/0215382) in view of Lindsay et al. (US 7,151,455).

With respect to Claims 1, 11, and 12, Breed et al. teach mounting a SAW switch sensors in a seat armrest (Figs. 20A-C & ¶s 166-168, wherein the seat armrest is read as a surface of the seat) & that SAW RFID based technology can be used as switches in a vehicle (¶ 446). However, Breed et al. fail to teach electrical connections of the switch with the SAW RFID device. Lindsay et al. teach a load (read as pressure) sensitive switch being electrically connected in series between a SAW RFID device and an antenna (Abstract, col. 5, lines 44-60,

col. 2, lines 60-67, col. 4, lines 34-36, and Fig. 1). Lindsay et al. further teaches connecting the switch device to sensors (col. 4, lines 45-55). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize in the seat of Breed et al., the SAW RFID pressure sensitive switch of Lindsay, because a serial connection allows for a simple binary mode of operation (Lindsay et al., col. 8, lines 65-67, transmitting or non-transmitting).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lebo et al. (US 5,900,808) teach a sensor and switch connected to an antenna and SAW resonator (col. 4, line 55 to col. 6, line 4). Jakoby (US 6,868,734) is an English language equivalent of DE 101 44 877. Litton teaches a pressure/temperature sensitive switch that activates a SAW based transponder (Abstract and col. 7, lines 9-43).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PUNAM PATEL whose telephone number is (571)272-6794. The examiner can normally be reached on Monday to Friday 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward Lefkowitz/
Supervisory Patent Examiner, Art Unit 2855

PP
02/25/2008